

MP300 CL3



A manufacturing tester for all types of contactless objects

The MP300 CL3 Advantage

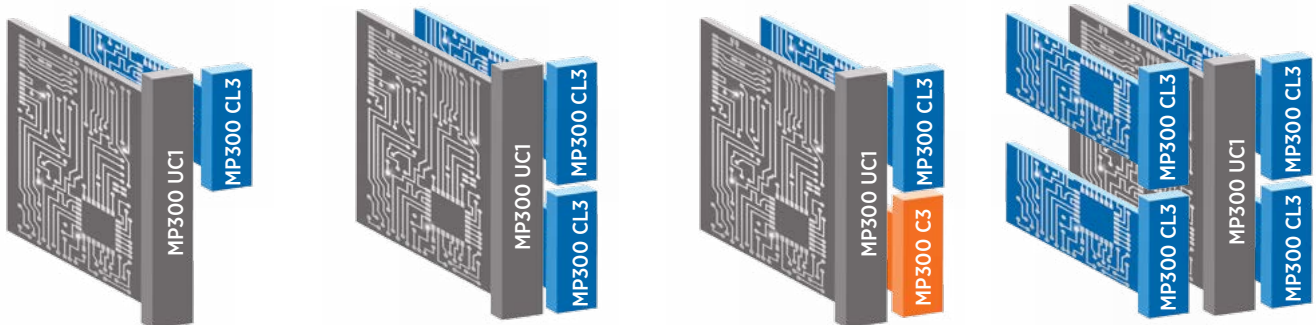
The MP300 CL3 capitalises on the success of its predecessors MP300 CL2 and MT1 to offer to the market a high end production tester for contactless objects. This tool brings further the test functions of its ancestors, and adds the possibility to perform all necessary tests to ensure of the quality of a NFC phone, in all modes (reader and card simulation modes).

- 1 External RX
- 2 SAM socket
- 3 NFC Antenna Card emulation Mux Control
- 4 Reader TX/RX Resonance frequency



The MP300 range of products is based on a mother board (MP300 UC1) which can host up to 4 different modules.

By mixing different modules together on the same mother board, it is possible to build customized configurations to fit your exact needs.



More combinaisons available on demand



The Ideal Tool

Supported Protocols

- ISO/IEC 14443-3 (proximity cards) (Type A/B)
- B' (Innovatron™)
- ISO/IEC 15693 (vicinity cards)
- ISO 18000-3 Mode 1
- Mifare™
- FeliCa™
- NFC Forum modes
- NFC Forum tags
- ISO 18092 (NFC-IP1)
- WPC (Qi)
- Raw mode: implementation of custom protocols and support of out of standard chips

Programmable parameters

- Physical parameters
Field strength, modulation index, rise & fall times
- Logical parameters
Type A pause, FWT, type B framing, communication speed

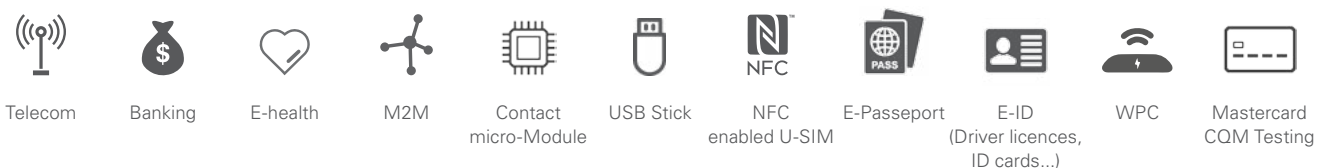
Available tests

- Electrical testing
- Resonance frequency measurement / Q factor
 - Complex impedance (chip/antenna)
 - Magnetic field measurement
 - Measurement of the power generated by the Base Station

Key Points

- Compatible with ISO/IEC 14443-3 and -4, ISO/IEC 15693, Mifare™, FeliCa™, Innovatron™ specifications
- Full management of the T=CL protocol
- Supports the highest bitrates (up to 848kbps by default, up to 6.8Mbps with the VHBR option)
- All physical parameters adjustable (field strength, carrier frequency, modulation index, rise and fall time of the modulation, ...)
- Advanced logical test features (response time measurement, modulation (positive/negative), short time between two commands, ...)
- Advanced electrical measurement features: chip impedance, resonance frequency, Q factor of a smartcard, load modulation of a chip
- Supports both terminal and smartcard simulation: the tool tests all modes of a NFC device using the same test antenna
- Supports test of WPC compatible devices in production, in conjunction or independently from the NFC interface.

BUSINESS AREAS



Supported protocols

ISO/IEC 14443-3 (proximity cards) (Type A/B)	
Supported data rates:	- 106, 212, 424, 848 kbps - Asymmetrical data rates supported - VHBR DSK 2 PSR
B' (Innovatron™)	
ISO/IEC 15693 (vicinity cards) ISO/IEC 15693 (vicinity cards)	
Supported communication speeds:	Low & high data rates, 1 out of 4 & 1 out of 256
ISO 18000-3 Mode 1	
Mifare™	
Types supported:	Classic, Light, Ultra Light, Ultra Light C, ...
FeliCa™	
Available data rates: 212 and 424 kbps	
NFC Forum modes	Peer2Peer Listening Polling
NFC Forum tags	
Types supported: Tag types 1,2,3,4	
ISO 18092 (NFC-IP1)	
Modes supported: Active/passive mode, in both Initiator/Target variantes	
WPC (Qi)	
Simulation of Mobile device, and Base station	
Raw mode: implementation of custom protocols and support of out of standard chips	

Programmable parameters

Physical Parameters	
- Field strength	
- Modulation index	
- Rise & fall times	
Logical Parameters	
- Type A pause	
- FWT	
- Type B framing	
- Communication speed	

Available tests

Electrical testing	
- Resonance frequency measurement/Q factor	
- Complex impedance (chip/antenna)	
- Magnetic field measurement	
- Measurement of the power generated by the Base station	

NI Services and Support

- Maintenance contracts :
 - Firmware/software updates
 - Hardware repair
 - Onsite customer support
 - Replacement tool
- Technical support located in Asia, Europe and Americas
- Training courses customizable :
 - knowledge level based
 - Time constraints
 - Topics of interest
- Debug and pre-certification of contact and contactless devices